

Work Order ID 159144

Wednesday, April 05, 2017 9:00:03 AM

159144

Page 1

Item ID: D3260-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Spring
 Start Date: 4/6/2017 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 4/19/2017 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: DAS 13 9-89 Date: APR 05 2017 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3260	Rev A								
100	PURCHASING	0.00							<u>DAS 13 9-89</u>
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>35884</u> Make as per Dwg D3260Possible Supplier: Victory SpringMaterial release note is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.10							
Packaging	Ensure Material Release Note is attached								
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control									<u>DAS 38 9-89</u>

10 APR 06 2017

22x 5017-4-25

22 APR 25 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

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Page 2

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>St 028</u>	0.00							
130						22	APR 26 2017		DAS 9-89
Packaging	Memo	0.10							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	1.00							17/4/27 J
Quality Control									

DAS
21
9-89

APR 27 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
2025-01-01 10:00 AM 10:00 AM								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Picklist Print

Wednesday, April 05, 2017 9:00:02 AM

Page 1

Work Order ID: 159144

159144

Parent Item: D3260-1

D3260-1

Parent Item Name: Spring

Start Date: 4/6/2017

Required Date: 4/19/2017

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP A04.03.29New issueKJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3260-1P *D3260-1P* Spring		Purchased	No			100	Each	0.0000	1	10			

****** 22x
22x Sp17-4-25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

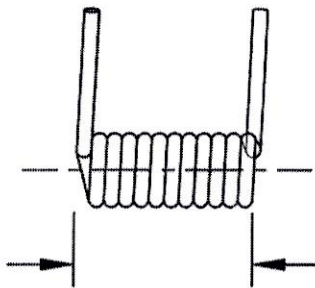
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																



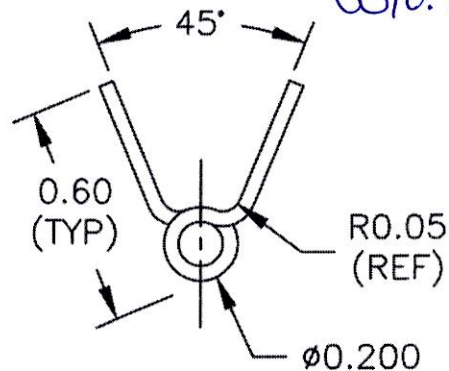
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3260	REV. A SHEET 1 OF 1
DATE 04.02.27		TITLE SPRING	SCALE 2:1
A	04.02.27	NEW ISSUE	

RELEASED
04.04.07 *[Signature]*

SPECIFICATION CONTROL DRAWING



Ø0.040
12 COIL
(REF 0.480)



APR 05 2017

DAS
13
9-01

W/O. 159144

D3260-1 SPRING

D3260-1 NOTES:

- 1) MATERIAL: AISI 302 SS SPRING WIRE Ø0.040 PER ASTM A313
(MIN TENSILE STRENGTH = 250 ksi)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35884**

Purchase Order Date 4/6/2017 12:35:34 PM
PO Print Date 4/6/2017

Page Number 1 of 2

Order From :

VC-VIC002

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

VICTORY SPRING LTD.
#2 6104 - 82 AVE.
EDMONTON, AB T6B 0E7
CA

E-MAILED
APR 06 2017

Contact Name

Vendor Phone 866 230 5312

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	D3260-1P	Spring	4/20/2017 Yes 4/20/2017		20.00 Each	\$9.25	\$185.00
	AS PER DWG D3260 REV.A B159144						
						Line Total:	\$185.00
2	71401-45	PROCUREMENT QUALITY CLAUSES	4/20/2017 No 4/20/2017		1.00	\$0.00	\$0.00
	Procurement Quality Clauses A005 RIGHT OF ENTRY A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE) A016 PERSONNEL QUALIFICATION A026 CERTIFICATION OF MATERIAL CONFORMANCE A040 NOTIFICATION OF QUALITY ESCAPE A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENTS						

Note:

4/6/2017



#2, 6104 - 82 Ave
Edmonton, AB T6B 0E7
t + 780 442 4020
e + accounts@victoryspring.ca

PACKING SLIP

Packing Slip: 37624
Date: Apr 21, 2017
Order Ref: PO35884

Sold to:

Dart Aerospace Ltd
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

Ship to:

Dart Aerospace Ltd
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

Shipped By: FedEx Overnight

Shipped Quantity	Backorder Quantity	Unit	Item No.	Description	Price
22	✓	EACH	-	D3260-1P Torsion Spring	9.25
60174-25					
Comment:					
DAS 38 9-88					

MATERIAL CERTIFICATION

REPORT FOR: Dart Aerospace Ltd.	DATE: 4/21/2017
PART/DRAWING #: D3260-1P	PO # PO35884
SPRING DESCRIPTION: Torsion Spring	QUANTITY: 22
MATERIAL GRADE: T302 Stainless Steel Wire Spring ASTM-313-03	
PROPERTIES:	
<u>Chemical</u>	<u>Physical</u>
Carbon: (C) 0.067	Size: 0.040"
Chromium: (Cr) 18.010	
Copper: (Cu) 0.450	Tensile: 297,000 / 298,000
Manganese: (Mn) 1.080	
Molybdenum: (Mo) 0.300	
Nickel: (Ni) 8.020	
Nitrogen: (N) 0.070	Heat # 410059
Phosphorus: (P) 0.029	
Silicon: (Si) 0.320	
Sulphur: (S) 0.001	
Mill Source: SUMIDEN	
Origin Country: USA	

Certified by: Jeremy Burnowes

Victory Spring Ltd. certifies this to be a true & accurate copy of the original contained in the company records.

CERTIFICATE OF CONFORMANCE

REPORT FOR : Dart Aerospace Ltd.	DATE: 4/21/2017
PART/DRAWING #: D3260-1P	PO # PO35884
DESCR: Torsion Spring	QUANTITY: 22

VICTORY SPRING CERTIFIES BY THIS DOCUMENT THAT ALL OPERATIONS ARE DONE ACCORDING TO
DRAWINGS AND SPECIFICATIONS

CHARACTERISTIC	SPECIFIED	MEASURED	NOTES
Material type	SS 302	SS 302	
Material diameter	0.040"	0.040"	
Coil I.D.		0.124"	
Coil O.D.	0.200"	0.206"	
Number of Coils	12.0 ref	12.1	
Overall Length	0.480"	0.523"	
End Type	as per dwg	Yes	
Helix	Left Hand	Left Hand	

Mill Certificate attached: Yes
Material Heat Number: 410059

Inspected by: Jeremy Burrowes - QA

Jeremy Burrowes